- displaying a group of trigger choices related to the utilization of an operating system's computerized file system comprising:
- a set of events for a triggering event, wherein said set of events optionally includes creating a file/object in said computerized file system, uploading a file/object in said computerized file system, downloading/exporting a file/object in said computerized file system, deleting a file/object from said computerized file system, editing a file/object in said computerized file system, moving a file/object in said computerized file system, copying a file/object in said computerized file system, renaming a file/object in said computerized file system, viewing a file/object in said computerized file system, accessing a file/object in said computerized file system, changing access rights for a file/object in said computerized file system, or a combination thereof;
- a set of actions for a triggering action, wherein said set of actions optionally includes sending an e-mail message, enforcing a constraint, archiving files/objects in said computerized file system, running a script, launching a program, or a combination thereof; and
- a set of users for a triggering group of users;
- selecting at least one triggering event;
- selecting at least one triggering action associated with said triggering event;
- selecting at least one triggering group of users associated with said triggering event and said triggering action;
- receiving at least one signal indicative of said trigger choices;
- configuring said trigger according to said trigger choices;
- monitoring said operating system's computerized file system for the occurrence of said at least one triggering event;
- initiating said associated triggering action for said associated triggering group of users to enable workflow automation.

Remarks/Arguments

Claims 1-65 are pending in this application. Claims 1, 13, 32, 36, 41, 47, 48, 49, 50, 54, 58, 61, 64 and 65 have been amended. Antecedent basis for each of these amendments may be found in the specification of the present application on page 4 lines 15-18. Applicant has not entered any new matter into the record.

The Examiner has objected to the Abstract and Drawings in the present Application. The Examiner has rejected Claims 1, 2, 4, 5, 7, 12-15, 18, 19, and 27-31 under 35 U.S.C. § 102(b) and 103(a). The Examiner has rejected Claims 35-65 under 35 U.S.C. § 102(e). A discussion of these objections and rejections follows.

Objections to the Abstract and Drawings

Applicant has shortened the Abstract according to the Examiner's specifications. Applicant submits that the Abstract is now in the proper form.

Applicant thanks Examiner for his direction with regard to the preparation and submission of formal drawings. Applicant shall proceed according to Examiner's instructions upon allowance of the claims in the present Application.

Claim Rejections Pursuant to 35 U.S.C. § 102(b)

The Examiner rejected claims 1, 2, 4, 5, 7, 12-15, 18, 19, and 27-31, under 35 U.S.C. §102(b), as being anticipated by U.S. Patent No. 5,771,354 (Crawford). Applicant respectfully traverses this rejection.

The Examiner contends that Crawford teaches a "processing circuit that is ... configured to automatically cause a notification message to be sent to said network upon the occurrence of at least one predetermined triggering event pertaining to the operation of said file server (Crawford, col. 43, lines 5-11), wherein said at least one predetermined triggering event and its associated type and content of automatic notification message are configurable under the control

of an auto-notification computer program routine residing on said computerized active file system (Crawford, Col. 43, lines 29-33)."

Applicant respectfully contends that Examiner has misinterpreted the cited passage. To support his contention that Crawford teaches a system/method that automatically causes a notification message to be sent to said network upon the occurrence of at least one predetermined triggering event pertaining to the operation of said file server, the Examiner specifically cites Col. 43, lines 5-11. Applicant reproduces this section below:

Crawford, Col. 43, lines 5-11

> If the command is not allowed, a security violation is logged at the customer server router, a flag is set to tell the customer server router to deny the request and a violation message is sent to the controlling session.

Crawford discloses a specific response to a specific situation. If the command is not allowed, then a security violation is logged ... and a violation message is sent to the controlling session. This is nothing more than what any generic security program should provide. There is no flexibility as to what the situation (event/trigger) and what the response (notification message) shall be because these items are statically predetermined by the program itself rather than being flexibly predetermined by a user of the program.

The present application is not anticipated by Crawford's security program because the present application does offer flexibility as to the definition of the event/trigger and the notification message. *Please see*, Specification, page 4, lines 20 through 28:

> One important function associated with the active virtual file system is its "Automatic Notification" function, which provides the capability of making the WAVFS an "active" file system. The Automatic Notification function checks to see if any "triggering" events have occurred when a user performs a particular task. Such a triggering event could be merely the opening or downloading of a file on the hard disk drive, or more importantly, the saving (or uploading) of a file on the hard disk drive of the WAVFS. **The Automatic Notification function defines what exact type of event will become a triggering event. Furthermore, the Automatic Notification function also defines what will be the triggering action, once the triggering event occurs.** (Emphasis added).

Also, please consider, Specification, page 28, lines 15-18:

> The precise type of auto-notification is **fully configurable** for each component in the preferred active virtual file system. (Emphasis added).

Claims 1, 13, and 32 (the independent claims rejected in this portion of the Examiner's Office Action) specifically claim this flexibility:

1. (Amended) A computerized active file system, comprising:
- a memory circuit for storing data;
- a communications port that is in communication with a network, said communications port being configured to transmit and receive data over said network; and
- a processing circuit that is configured to control the flow of data between said memory circuit and said communications port; said processing circuit also being configured to control said memory circuit so as to operate as a file server; said processing circuit being further configured to automatically cause a notification message to be sent to said network upon the occurrence of at least one predetermined triggering event pertaining to the operation of said file server, **wherein said at least one predetermined triggering event and its associated type and content of automatic notification message are configurable under the control of an auto-notification computer program routine** and wherein said automatic notification message enables said file server to be used in workflow automation. [See, pg 4, lines 15-18 for workflow automation].

13. (Amended) A method for operating a computerized active file system, comprising:

- providing a file server having a memory circuit for storing data, a communications port for transmitting and receiving data over a network, and a processing circuit that controls the flow of data between said memory circuit and said communications port, said file server treating predetermined data groups as single file entities; and
- automatically causing a notification message to be sent to said network upon the occurrence of at least one predetermined triggering event pertaining to the operation of said file server, **wherein said at least one predetermined triggering event and its associated type and content of automatic notification message are configurable under the control of an auto-notification computer program routine** and wherein said automatic notification message enables said file server to be used in workflow automation.

32. (Amended) A computerized active virtual file system, comprising:

- a memory circuit for storing data;
- a communications port that is in communication with a network, said communications port being configured to transmit and receive data over said network; and
- a processing circuit that is configured to control the flow of data between said memory circuit and said communications port; said processing circuit also being configured to control said memory circuit so as to operate as a file server; said processing circuit being further configured to control the access rights over said network of a plurality of users to files stored on, or uploaded to, said file server, while providing an automatic notification message to predetermined of said plurality of users over said network when a triggering event occurs pertaining to the operation of said file server **wherein said at least one predetermined triggering event and its associated type and content of automatic notification message are configurable under the control of an auto-notification computer program routine** and wherein said automatic notification message enables said file server to be used in workflow automation.

This language is original to Claims 1 and 13 of this application so there are no narrowing amendments with regard to Crawford. With regard to Claim 32, the clarifying language from Claims 1 and 13 has been incorporated into this claim as well. There is nothing in Crawford which describes or suggests the configuration of the triggering event and its associated automatic

notification message as claimed in Claims 1, 13 and 32. Crawford only teaches the sending of a message upon the very specific event of a security violation. (See, Col. 43, lines 5-11).

These arguments distinguish Crawford from the current application and overcome the rejection raised by the Examiner based on Crawford. While Crawford discloses a specific response to a security violation in its file system, it does not disclose the configuration of events and messages to create a truly active file system that will react to a multitude of scenarios promulgated by end users and that may be further used to effect workflow automation. Thus, Crawford does not teach or suggest the method and system claimed in the present application. The Crawford reference cannot support the rejection of claims 1, 13, 32 and their associated dependent claims. Therefore, Applicant requests reconsideration and allowance of these claims and their associated dependent claims.

Claim Rejections Pursuant to 35 U.S.C. § 102(e)

The Examiner rejected claims 36-65 under 35 U.S.C. § 102(e), as being anticipated by U.S. Patent No. 5,999,978 (Angal). Applicant respectfully traverses this rejection. There are eleven (11) independent claims in this subset of claims (36, 41, 47, 48, 49, 50, 54, 58, 61, 64 and 65).

Although Examiner provides a varying array of rejections for each of the claims in this subset, the heart of his rejection, for all of these claims, appears to lie in the argument cited against Claim 36. The Examiner contends that "Angal teaches a method for supporting a computerized file system (Col. 2, lines 49-51) comprising preconfiguring at least one triggering

event in a computer program in communication with said computerized file system (Col. 8, lines 49-54); preconfiguring at least one associated action in said computer program, wherein said triggering event and associated action are related to the operation of said computerized file system (Col. 9, lines 54-58); monitoring said computerized file system with said computer program for the occurrence of at least one preconfigured triggering event (Col. 11, lines 4-10); and initiating said preconfigured associated action with said computer program when said triggering event occurs (Col. 11, lines 31-38)."

Applicant respectfully contends that Examiner has misinterpreted the cited passages. To support his contention that Angal anticipates the claims of the present application, the Examiner cites Angal, Abstract; Col. 2, lines 49-51; Col. 8, lines 49-54; Col. 9, lines 54-58; Col. 11, lines 4-10 and 31-38. These sections are reproduced to assist Applicant in differentiating Angal from the present application. (Emphasis added).

Angal, Abstract

> An access control database defines access rights through the use of access control objects. The access control objects include group objects, each defining a group and a set of users who are members of the group, and rule objects. A first subset of the rule objects each specify a set of the group objects, a set of the management objects, and access rights by the users who are members of the groups defined by the specified set of the group objects to the specified set of management objects. The access control server responds to the access request from the users by granting, denying, and partially granting and denying the access requested in each access request in accordance with the access rights specified in the access control database. A second subset of the rule objects in the access control database each specify user access rights to event notifications generated by the specified set

of **management objects**. An event registry is used for registering event notification requests by users, each event notification request specifying event notifications from specified sets of the management objects. An event router receives event notifications generated by the management objects. It responds to each event notification by sending corresponding event notification messages to users who have registered a corresponding event notification request with the event registry and also have access rights to the received event notification in accordance with the access rights specified in the access control database.

Angal, Col. 2, lines 49-51

In summary, the present invention is a system and method for **controlling access to management objects in a computer network**.

Angal, Col. 8, lines 49-54

The access security rules are stored in persistent storage, with recently used portions also stored in cache memory, at the MIS and each auxiliary server. Whenever any access control rule is updated, deleted or added to the system, the rule base in every auxiliary server is updated in synchronized fashion using an event propagation mechanism that is also used for handling other types of event messages.

Angal, Col. 9, lines 54-58

Each rule definition is represented by a rule object, having the following fields ... an enforcement action, indicating whether the specified groups of users have or do not have access to the specified target set; in a preferred embodiment the enforcement action can be set to Deny with Response, Deny without Response, or Grant.

Angal, Col. 11, lines 4-10 and 31-38

When an access request is received, the access request is compared successively with the global deny rule, the targeted deny rules, the global grant rule, and the targeted allow rules, in that order. The first rule found that matches the access request is applied to it. If no matching rule is found, then the appropriate default rule is applied.

...

> Each access request is received by the MIS, which then compares the access request with the global deny rule. If a match is found, the request is denied, and a response is returned to the initiator if appropriate. No response is returned to the initiator when the global deny rule specifies an enforcement action of "Deny without Response," or the request itslef specifies an unconfirmed mode.

Angal teaches a system which monitors/controls access to management objects in network and further provides for an event notification regarding the permissibility of such access if either a rule associated with the specific management object permits such notification and/or if the request from the network user specifies a desire to have such a notification. Angal, however, has two key differences from the present application.

First, Angal concerns management objects which are defined in Angal's specification as *devices* on the network that are typically managed by Simple Network Management Protocol (SNMP). *See,* Angal, Col. 1, Lines 12-34. Angal further specifically states that: "For purposes of this document, we are ***only*** concerned with the management of objects in the network which contain management information and resource control variables." *See,* Angal, Col. 4, Lines 1-5. The type of devices addresssed by Angal include such management objects as printers or other computer hardware. Nothing in Angal describes or suggests that its functionality be applied toward a file system.

Second, even if Angal suggested that its functionality be applied to a file system (which it does not), Angal merely provides a particular instance of a trigger and notification (access

request and notification thereof). While there is some limited ability to specify whether or not a specific accessor should receive a notification or not, like Crawford, the flexibility in this system is extremely limited. Angal specifies a very limited range of possible responses in the very section cited by the Examiner (Col. 9, Lines 54-58):

> An enforcement action, indicating whether the specified groups of users have or do not have access to the specified target set; in a preferred embodiment the enforcement action can be set to Deny with Response, Deny without Response, or Grant.

There is no suggestion of utilizing Angal to run programs or perform other functions that enable the active virtual file system to be used in workflow automation. *See*, Specification, page 4, lines 15-20. Even if this were so, it would be possible to configure the present invention to perform Angal-like functionality but it would be impossible to configure Angal to provide the rich functionality possible with the present invention.

The present application is not anticipated by Angal's device management program because the present application is specifically designed for a file system and it does offer flexibility as to the definition of the event/trigger and the notification message. *Please see*, Specification, page 4, lines 20 through 28:

> **The Automatic Notification function defines what exact type of event will become a triggering event. Furthermore, the Automatic Notification function also defines what will be the triggering action, once the triggering event occurs.**

Each independent claim clearly indicates that this system is applied to a file system and that it includes much greater flexibility than Angal. Claim 36 is representative of these arguments for all of the independent claims at issue.

> 36. (Amended) A method for supporting a computerized file system comprising:
>
> - preconfiguring at least one triggering event in a computer program in communication with said computerized file system;
> - preconfiguring at least one associated action in said computer program, wherein said triggering event and associated action are related to the operation of said computerized **file system** and enable said file system to be used in a workflow automation;
> - monitoring said computerized file system with said computer program for the occurrence of said at least one preconfigured triggering event; and
> - initiating said preconfigured associated action with said computer program when said triggering event occurs.

The present application provides for the preconfiguration of an event and an associated action relating to the operation of the file server. No limitation is provided with regard to what the preconfigured event or action may be except that it be related to the operation of the file system. Herein lies the rich functionality possible within the present invention. The administrator is not limited to merely responding to a command to access a particular file and deliver a message to the requestor as to whether or not they will be granted access. Rather, any scope of events and actions may be configured so long as such events and actions are somehow related to the operation of the file server. Applicant provides some examples of such events and

actions in the Specification on pages 4 (lines 15-20); 6 (lines 20-28); 7 (lines 13-14); 24 (lines 10-20); 26 (line 22) – 27 (line 10). Although, certainly, access rights and notifications thereof are included in these descriptions, the key to the current invention is that it is not limited to merely this subset of functionality relating to a file server. Applicant has entered a clarifying amendment to assist the Examiner in understanding the rich level of functionality present in the current invention. Rather than narrowing the applicable claims, this amendment serves to illustrate how broad the functionality provided by the current system actually is. Again, Claim 36 is representative of the clarifying amendment entered for all of the independent claims of the current application:

(Amended) A method for supporting a computerized file system comprising:

- preconfiguring at least one triggering event in a computer program in communication with said computerized file system;
- preconfiguring at least one associated action in said computer program, wherein said triggering event and associated action are related to the operation of said computerized file system and **enable said file system to be used in a workflow automation**;
- monitoring said computerized file system with said computer program for the occurrence of said at least one preconfigured triggering event; and
- initiating said preconfigured associated action with said computer program when said triggering event occurs .

This amendment more clearly illustrates that there is a broader scope to the current invention that is not limited by a specific implementation for a specific purpose as proposed by Angal and Crawford. Support for all of the amendments may be found via the examples cited above as well

as in the Summary, Page 4, lines 15-20: *The present invention [provides] a web-based active virtual file system that can be configured to run programs, enforce constraints, send notifications, and perform other functions using predetermined rules that enable the active virtual file system to be used in workflow automation.*. The rules, events, triggers, messages, notifications, etc. of the current invention are completely configurable and may be used to create complex workflow scenarios that are not possible in the cited patents.

Therefore, while Angal discloses a method for managing access to network devices and providing a very limited array of responses to a request to access such a network device, there is no discussion or suggestion that this functionality be applied to a file system or that Angal be modified to provide this functionality. Indeed, the specification of the Angal patent specifically limits its scope to network devices only. Furthermore, there is no real ability to configure the event (only access of the network device is provided by this system) or the action (only three options are provided: deny, deny with response, and grant). Nothing in this reference discloses the advanced configuration options of the present invention which permit a user to completely define the triggering event and the automated action in response to such a detected triggering event. Furthermore, nothing in Angal suggests utilizing the trigger/action paradigm to create a workflow automation sequence as in the present application. Thus, Angal does not teach or suggest the method and system claimed in the present application. The Angal reference cannot support the rejection of claims 36-65. Therefore, Applicant requests reconsideration and allowance of the independent claims in this subset as well as their associated dependent claims.

Claim Rejections Pursuant to 35 U.S.C. § 103(a)

The Examiner rejected a plethora of claims under 35 U.S.C. § 103(a), as being obvious in light of U.S. Patent No. 5,771,354 (Crawford), U.S. Patent No. 5,999,978 (Angal) and a variety of other patents as to minor features of the present application. Applicant respectfully traverses this rejection. Applicant contends that, for the reasons elucidated above, Angal may not be combined with Crawford. Angal, by its specification, specifically limits its application to devices in a network and cannot be combined with Crawford to apply the limited functionality present therein to the file system provided by Crawford. Applicant reiterates the pertinent passage found in Angal: "For purposes of this document, we are ***only*** concerned with the management of objects in the network which contain management information and resource control variables." *See,* Angal, Col. 4, Lines 1-5. Angal does not discuss or suggest the application of its technology to folders or other containers in a file server. Therefore, Angal and Crawford do not comprise a permissible combination..

Even if Angal and Crawford could permissibly be combined, neither of these patents discusses or suggests the rich functionality inherent in the present invention which allows a user to define the trigger/event and the corresponding action/notification to enable workflow automation. Both Angal and Crawford are directed toward a limited set of events (i.e., security violations) and reactions (grant, denial, message thereof). There is next to no ability to configure the event or the reaction, only whether such will take place. Finally, the claim language of every independent claim in the current application substantially specifies that the "triggering event and

its associated type and content of automatic notification message are configurable under the control of an auto-notification computer program." Although some dependent claims provide more specific examples of this functionality, these examples are intended to be illustrative of the types of triggers and notifications possible and certainly are not intended to limit the independent claims in any way whatsoever.

The Examiner further cites a number of additional patent references in this set of rejections which concentrate on more minor aspects of the system.

The Examiner contends that Payne (U.S. Patent 6,021,433) generally teaches that a URL may be embedded in the notification message to allow the user to be brought to the desired information. Applicant does not address these rejections as it is hoped that the remarks presented with regard to Angal and Crawford will be sufficient to distinguish the current application from the prior art with regard to the core elements claimed in that application.

The Examiner contends that Thurlow (U.S. Patent 5,917,489) describes certain GUI components. Thurlow is not relevant to the current application because it is directed toward an e-mail messaging system and does not describe or suggest the application of rules to a file system. Furthermore, the Thurlow patent was filed in January 1997. To this date, Applicant is unaware of any computer program which allows the application of rules (triggers/notifications) to a file system. Therefore, it does not appear to be a plausible argument that it would have been obvious to one of skill in the art to apply the technology described in Payne to a file system as described in the current application. Applicant does not substantively address these rejections as it is

hoped that the remarks presented with regard to Angal and Crawford will be sufficient to distinguish the current application from the prior art with regard to the core elements claimed in that application.

The Examiner contends that Serbinis (U.S. Patent 6,314,425) describes a simplified method for adding new users. Applicant does not address these rejections as it is hoped that the remarks presented with regard to Angal and Crawford will be sufficient to distinguish the current application from the prior art with regard to the core elements claimed in that application.

Conclusion

In light of the arguments and amendments made to the claims herein, it is respectfully submitted that the claims of the present application meet the requirements of patentability under 35 U.S.C. § 102(b); 102(e) and 103(a). Accordingly, reconsideration and allowance of these claims are earnestly solicited. Applicant's undersigned attorney has made a good faith effort to revise the claims so as to meet the patentability concerns raised by the Examiner in the Office Action. If the Examiner feels that any additional modifications are necessary prior to the issuance of a notice of allowance, he is invited to call the Examiner's undersigned attorney at the phone number given below so that those specific issues can be worked out.

Respectfully submitted,
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VERSION WITH MARKINGS TO SHOW CHANGES MADE

ABSTRACT OF THE DISCLOSURE

A computerized file system is provided that is accessible by users over the Internet or other type of network, in which certain "triggering events" pertaining to the operation of the file system automatically generate a notification message to certain of the users. Once a user has been properly authenticated, this user's access rights are determined to see whether the user can read, write, or read/write files on the file server of the file system, and these rights also determine if the user may download files from or upload files to the file server. An Automatic Notification function checks to see if any "triggering" events have occurred when a user performs a particular task. The Automatic Notification function defines what exact type of event will become a triggering event, and also defines what will be the triggering action, once the triggering event occurs, and stores this information in a database. ~~In the preferred embodiment, these Automatic Notification messages are transmitted via E-mail technology. By use of E-mail type messages, the notification process can be initiated simultaneously for all users who are to receive any such notification message. The Auto-notification function can also comprise other programs that are launched to perform certain tasks. The precise type of auto-notification message is fully configurable for each component in the file system. More than one single file can be stored having the same virtual file name, at least as far as the individual users can determine. The actual filename on the file server is always unique for each individual file, and the actual filenames are stored in a "Files Table," and links to the files are stored in the database.~~

What is claimed is:

1. (Amended) A computerized active file system, comprising:
- a memory circuit for storing data;
- a communications port that is in communication with a network, said communications port being configured to transmit and receive data over said network; and
- a processing circuit that is configured to control the flow of data between said memory circuit and said communications port; said processing circuit also being configured to control said memory circuit so as to operate as a file server; said processing circuit being further configured to automatically cause a notification message to be sent to said network upon the occurrence of at least one predetermined triggering event pertaining to the operation of said file server, wherein said at least one predetermined triggering event and its associated type and content of automatic notification message are configurable

under the control of an auto-notification computer program routine ~~residing on said computerized active file system~~ and wherein said automatic notification message enables said file server to be used in workflow automation. [See, pg 4, lines 15-18 for workflow automation].

13. (Amended) A method for operating a computerized active file system, comprising:

- providing a file server having a memory circuit for storing data, a communications port for transmitting and receiving data over a network, and a processing circuit that controls the flow of data between said memory circuit and said communications port, said file server treating predetermined data groups as single file entities; and
- automatically causing a notification message to be sent to said network upon the occurrence of at least one predetermined triggering event pertaining to the operation of said file server, wherein said at least one predetermined triggering event and its associated type and content of automatic notification message are configurable under the control of an auto-notification computer program routine ~~residing on said computerized active file system~~ and wherein said automatic notification message enables said file server to be used in workflow automation.

32. (Amended) A computerized active virtual file system, comprising:

- a memory circuit for storing data;
- a communications port that is in communication with a network, said communications port being configured to transmit and receive data over said network; and
- a processing circuit that is configured to control the flow of data between said memory circuit and said communications port; said processing circuit also being configured to control said memory circuit so as to operate as a file server; said processing circuit being further configured to control the access rights over said network of a plurality of users to files stored on, or uploaded to, said file server, while providing an automatic notification message to predetermined of said plurality of users over said network when a triggering event occurs pertaining to the operation of said file server wherein said at least one predetermined triggering event and its associated type and content of automatic notification message are configurable under the control of an auto-notification computer program routine and wherein said automatic notification message enables said file server to be used in workflow automation.

36. (Amended) A method for supporting a computerized file system comprising:
-preconfiguring at least one triggering event in a computer program in communication with said computerized file system;
-preconfiguring at least one associated action in said computer program, wherein said triggering event and associated action are related to the operation of said computerized file system and enable said file system to be used in a workflow automation;
-monitoring said computerized file system with said computer program for the occurrence of said at least one preconfigured triggering event; and
-initiating said preconfigured associated action with said computer program when said triggering event occurs .

42. (Amended) A method for supporting a computerized file system that is part of an operating system comprising:

- preconfiguring at least one triggering event in a computer program in communication with said operating system's computerized file system;
- preconfiguring at least one associated action in said computer program, wherein said triggering event and associated action are related to the operation of said operating system's computerized file system and said triggering event and associated action enable workflow automation in said file system;

- monitoring said operating system's computerized file system with said computer program for the occurrence of said at least one preconfigured triggering event; and
- initiating said associated preconfigured associated action with said computer program when said triggering event occurs .

51. (Amended) A method for directly supporting a distributed computerized file system, wherein said distributed computerized file system is accessible via the Internet, comprising:
    - preconfiguring at least one triggering event and preconfiguring at least one associated action, in a computer program in communication with said distributed computerized file system, wherein said triggering event and associated action are related to the operation of said computerized file system and enable workflow automation in said file system;
    - monitoring said distributed computerized file system, with said computer program, for the occurrence of said at least one preconfigured triggering event; and
    - initiating said preconfigured associated action with said computer program when said triggering event occurs .

52. (Amended) A method for supporting a computerized object system comprising:
    - preconfiguring at least one triggering event and preconfiguring at least one associated action, in a computer program in communication with said computerized object system, wherein said triggering event and associated action are related to the operation of said computerized object system;
    - monitoring said computerized object system with said computer program for the occurrence of said at least one preconfigured triggering event; and
    - initiating said preconfigured associated action with said computer program when said triggering event occurs to enable workflow automation in said file system.

53. (Amended) A method for supporting a computer comprising a file server operating system, wherein said file server operating system comprises a computerized file system, wherein said file server operating system's computerized file system is stored in a table, wherein said method comprises:

- preconfiguring at least one triggering event, in a computer program in communication with said file server operating system's computerized file system, to enable workflow automation wherein said at least one triggering event optionally includes creating a file/object in said computerized file system, uploading a file/object in said computerized file system, downloading/exporting a file/object in said computerized file system, deleting a file/object from said computerized file system, editing a file/object in said computerized file system, moving a file/object in said computerized file system, copying a file/object in said computerized file system, renaming a file/object in said computerized file system, viewing a file/object in said computerized file system, accessing a file/object in said computerized file system, changing access rights for a file/object in said computerized file system, or a combination thereof;
- preconfiguring at least one associated action in said computer program, to enable workflow automation wherein said triggering event and associated action are related to the operation of said file server operating system's computerized file system, and wherein said associated action optionally includes sending an e-mail message, enforcing a constraint, archiving files/objects in said computerized file system, running a script, launching a program, or a combination thereof;
- preconfiguring at least one associated group of users in said computer program wherein said associated group of users are associated with said triggering event and said associated action;
- monitoring said file server operating system's computerized file system for the occurrence of said at least one preconfigured triggering event; and
- initiating said preconfigured associated action with said computer program with regard to said preconfigured associated group of users when said triggering event occurs.

54. (Amended) A computerized active file system comprising:

- a computerized file system; and
- a computer readable medium, wherein said computer readable medium is in communication with said computerized file system, and wherein said computer readable medium comprises computer executable instructions for initiating a method comprising:
- preconfiguring at least one triggering event;
- preconfiguring at least one associated action, wherein said triggering event and associated action are related to the operation of said computerized file system and enable workflow automation in said file system; and
- preconfiguring at least one associated group of users wherein said associated group of users is associated with said triggering event and said associated action;
- monitoring said computerized file system for the occurrence of said at least one preconfigured triggering event; and
- initiating said at least one preconfigured associated action for said preconfigured associated group of users when said at least one preconfigured triggering event occurs .

55. (Amended) A computerized active file system comprising:

- an operating system wherein said operating system comprises a computerized file system;
- a computer readable medium, wherein said computer readable medium is in communication with said operating system's computerized file system, and wherein said computer readable medium comprises computer executable instructions for performing a method comprising:
- preconfiguring at least one triggering event wherein said triggering event is related to the operation of said operating system's computerized file system;
- preconfiguring at least one associated action, wherein said associated action is associated with said triggering event; and
- preconfiguring at least one associated group of users wherein said preconfigured associated group of users is associated with said triggering event and said associated action;

- monitoring said operating system's computerized file system for the occurrence of said at least one preconfigured triggering event; and
- initiating said preconfigured associated action to enable workflow automation for said preconfigured group of users when said triggering event occurs.

59. (Amended) A computer readable medium having computer executable instructions for performing a method comprising:

- preconfiguring at least one triggering event wherein said triggering event is related to the operation of a computerized file system;
- preconfiguring at least one associated action, wherein said associated action is associated with said triggering event;
- preconfiguring at least one associated group of users wherein said preconfigured associated group of users is associated with said triggering event and said associated action;
- monitoring said computerized file system for the occurrence of said at least one preconfigured triggering event; and
- initiating said preconfigured associated action to enable workflow automation for said associated preconfigured group of users when said preconfigured triggering event occurs.

62. (Amended) A computer readable medium having computer executable instructions for performing a method comprising:

- preconfiguring at least one triggering event wherein said triggering event is related to the operation of an operating system's computerized file system;
- preconfiguring at least one associated action, wherein said associated action is associated with said triggering event;
- preconfiguring at least one associated group of users wherein said preconfigured associated group of users is associated with said triggering event and said associated action;
- monitoring said operating system for the occurrence of said at least one preconfigured triggering event; and

- initiating said preconfigured associated action for said preconfigured associated group of users when said preconfigured triggering event occurs to enable workflow automation.

64. (Amended) In a computerized active file system having a graphical user interface, a method of preconfiguring and performing a trigger, the method comprising:

- displaying a group of trigger choices related to the utilization of a computerized file system comprising:
- a set of events for a triggering event, wherein said set of events optionally includes creating a file/object in said computerized file system, uploading a file/object in said computerized file system, downloading/exporting a file/object in said computerized file system, deleting a file/object from said computerized file system, editing a file/object in said computerized file system, moving a file/object in said computerized file system, copying a file/object in said computerized file system, renaming a file/object in said computerized file system, viewing a file/object in said computerized file system, accessing a file/object in said computerized file system, changing access rights for a file/object in said computerized file system, or a combination thereof;
- a set of actions for a triggering action, wherein said set of actions optionally includes sending an e-mail message, enforcing a constraint, archiving files/objects in said computerized file system, running a script, launching a program, or a combination thereof; and
- a set of users for a triggering group of users;
- selecting at least one triggering event;
- selecting at least one triggering action associated with said triggering event;
- selecting at least one triggering group of users associated with said triggering event and said triggering action;
- receiving at least one signal indicative of said trigger choices;
- configuring said trigger according to said trigger choices;
- monitoring said computerized file system for the occurrence of said at least one triggering event;
- initiating said associated triggering action for said associated triggering group of users to enable workflow automation in said file system.

65. (Amended) In a computerized active file system having a graphical user interface, a method of preconfiguring and performing a trigger, the method comprising:

- displaying a group of trigger choices related to the utilization of an operating system's computerized file system comprising:
- a set of events for a triggering event, wherein said set of events optionally includes creating a file/object in said computerized file system, uploading a file/object in said computerized file system, downloading/exporting a file/object in said computerized file system, deleting a file/object from said computerized file system, editing a file/object in said computerized file system, moving a file/object in said computerized file system, copying a file/object in said computerized file system, renaming a file/object in said computerized file system, viewing a file/object in said computerized file system, accessing a file/object in said computerized file system, changing access rights for a file/object in said computerized file system, or a combination thereof;
- a set of actions for a triggering action, wherein said set of actions optionally includes sending an e-mail message, enforcing a constraint, archiving files/objects in said computerized file system, running a script, launching a program, or a combination thereof; and
- a set of users for a triggering group of users;
- selecting at least one triggering event;
- selecting at least one triggering action associated with said triggering event;
- selecting at least one triggering group of users associated with said triggering event and said triggering action;
- receiving at least one signal indicative of said trigger choices;
- configuring said trigger according to said trigger choices;
- monitoring said operating system's computerized file system for the occurrence of said at least one triggering event;
- initiating said associated triggering action for said associated triggering group of users to enable workflow automation.